ABSTRACT OF THE DISCLOSURE

An auto-cruise apparatus capable to switch the modes between the vehicle-to-vehicle distance control and the constant vehicle speed mode is provided. The inventive auto-cruise apparatus comprises a vehicle-to-vehicle distance controller for controlling a travel of a subject vehicle such that a vehicle-to-vehicle distance between the subject vehicle and a preceding vehicle becomes equal to a set vehicle-to-vehicle distance and input means capable of being operated by a driver with regard to a vehicle-to-vehicle distance control performed by said vehicle-to-vehicle distance controller. The auto-cruise apparatus further comprises a constant vehicle speed controller for controlling said vehicle speed such that said vehicle speed is maintained at a set vehicle speed whether said preceding vehicle may exist or not and a mode selector for selecting, in accordance with predetermined operations upon said input means, either a vehicle-to-vehicle distance control mode in which a travel of said subject vehicle is controlled by said vehicle-to-vehicle distance controller or a constant vehicle speed control mode in which said travel is controlled by said constant vehicle speed controller. With such structure, a travel control by either said vehicle-to-vehicle distance controller or said constant vehicle speed controller is performed in accordance with a travel mode that has been selected by said mode selector. In accordance with the invention, since the mode switching function is provided on the existing input means, a travel control switching between the vehicle-to-vehicle distance control mode and the constant vehicle speed control mode could be performed without incurring a high cost.

(Figure 4)